

REMARKS

After accepting proposed amendments by the Examiner to allow the claims, it was determined that the allowed claims needed additional amendments that may not be made by an examiner's amendment. A Request for Continued Examination (RCE) under § 1.114 is being filed prior to payment of the issue fee in order to continue examination.

By this amendment, Claims 1, 4, 5, 16, 22, 25-27, 30, 31, and 33 have been amended. Amendments shown reflect amendments from the examiner's amendments presented in the Supplemental Notice of Allowability mailed June 20, 2007, and not the response to the previous Office Action. Claims 2, 3, 6-8, 10-15, 17-21, 23, 24, 29, 32, and 34 have been previously canceled. Hence, Claims 1, 4, 5, 9, 16, 22, 25-28, 30, 31, and 33 are pending in the application. No new matter has been added to the application.

Arguments are presented with respect to the cited art from the last Office Action which was mailed November 7, 2006.

STATEMENT OF SUBSTANCE OF INTERVIEW

On June 4, 2007 a telephonic interview was conducted with the Examiner in which the following was discussed: Applicant's representative proposed an amendment that the Examiner stated changed the scope of the claims and is unable to be made via Examiner's Amendment. Examiner agreed to change the location of limitations in Claims 1, 16, and 22.

THE PENDING CLAIMS ARE PATENTABLE OVER THE CITED ART

Claims 1, 2 and 16-23 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application US 2004/0230605 A1, entitled "Method, System, and Product for Data

Integration through a Dynamic Common Model” by Tamboli et al. ("*Tamboli*") filed April 6, 2004.

Claims 1, 2, 5-10, 14, 16, 17 and 19-23 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art ("*APA*") in the application in view of U.S. Patent Application US 2004/0 A1, entitled "System, Method, and Computer Program Product for Efficiently Translating Relational Tuples to Object-Oriented Object" by Srinivasan et al. ("*Srinivasan*") filed April 6, 1999.

Applicants respectfully traverse.

Each pending claim recites at least one limitation that is not disclosed, taught, or suggested by *Tamboli* or *APA* in view of *Srinivasan*.

CLAIM 1

Claim 1 recites:

**receiving a request to execute a first function to return data
from a source, wherein the first function is able to
return data with different organization and data types
from more than one source;**
in response to receiving said first request, performing the steps of:
**executing a second function to obtain, from said source,
organization and data type information describing data
to be returned from said source by the first function,
registering the organization and data type information
describing the data to be returned from said source,
executing said first function against said source to obtain result
data,
storing the result data obtained from the source in a format
that reflects said organization and data type
information, and
returning the result data**

At least the above-bolded portions of Claim 1 are not disclosed, taught, or suggested by *Tamboli* or *APA* in view of *Srinivasan*.

DIFFERENCES BETWEEN CLAIM 1 AND TAMBOLI

The Office Action alleged that *Tamboli* paragraphs [0075]-[0077] teach each of the limitations in Claim 1. However, Claim 1 recites limitations that were not disclosed within the cited paragraphs of *Tamboli*. Claim 1 recites **“storing the result data obtained from the source in a format that reflects said organization and data type information, and returning the result data”**. *Tamboli* does not recite the limitation that the data is returned in the same format as the data as stored in the data source. In *Tamboli*, the data is transformed in each instance, from a first native format to a common dynamic format. The data is then transformed from the common dynamic format to a second native format. Each transformation requires a mapping to the new format. Claim 1, however, simply *“execut[es] a second function to obtain, from said source, organization and data type information describing data to be returned from said source by the first function”* and then *“storing the result data obtained from the source in a format that reflects said organization and data type information, and return[s] the result data”*. Thus, not all of the limitations of Claim 1 are disclosed or taught in *Tamboli*.

Additionally, the Office Action alleges that the second function’s actions are disclosed in par. [0077] of *Tamboli*. Claim 1 recites *“executing a second function to obtain, from said source, organization and data type information describing data to be returned from said source by the first function”* and then *“performing said first function against said source to obtain result data”*. *Tamboli* discloses how transformation services transform data from a native mapping format into a dynamic common format. An adaptor provides source data from the XML document so that the transformation service can locate an XML stylesheet with the mappings and translation rules. Thus, in *Tamboli*, the actual data is initially retrieved from the data source to perform data type identification, not after data types are already identified as in Claim 1.

Furthermore, Claim 1 recites that a second function returns the organization and data type information and that the data types are “*obtain[ed] from said source*”. Thus, the types are determined by looking at the data source and not in the actual data. In *Tamboli*, the data types are determined by examining the data itself.

It is respectfully submitted that, for at least the above reasons, *Tamboli* does not disclose, teach, or suggest the above-bolded elements of Claim 1. As at least one element is not disclosed, taught, or suggested by *Tamboli*, Claim 1 is patentable over the cited art and is in condition for allowance.

DIFFERENCES BETWEEN CLAIM 1 AND APA IN VIEW OF SRINIVASAN

The Office Action alleges that the first function is disclosed as *APA*. However, Claim 1, as amended, recites limitations that were not disclosed within the *APA*. Specifically, the Claim 1 limitation “***storing the result data obtained from the source in a format that reflects said organization and data type information***” was not disclosed. One characteristic of the *APA* was that the result data returned had “no information about the formatting of fields within the blob”. *Written Spec. p. 6*. In Claim 1, the result data contains the organization and data type information when it is returned by the first function.

With respect to *Srinivasan*, Claim 1 recites “***executing a second function to obtain, from said source, organization and data type information describing data to be returned from said source by the first function***”. Information about the data returned in the first function is not obtained from the data itself, but from the data source. *Srinivasan* discloses setting attributes of the application objects using information in the tuples, or the data itself. Thus, in *Srinivasan*, the actual data is used from the data source to perform data type identification, not after data types are already identified as in the Claims. Retrieving the data

after the data types are identified allows the database server to dynamically obtain the data type information so that additional requests can be made with no change made to the functions.

CLAIM 31

Claim 31 recites:

receiving a request to execute a first function that returns a data structure capable of storing any data type;
wherein the data structure contains data from a data source;
executing a second function that generates and returns a list of data types to be returned by the first function;
wherein the list of data types is received from the data source indicated by the first function;
registering query duration types based upon the list of data types;
generating output buffers according to the query duration types;
completing query processing using the query duration types;
type-checking the first function using the query duration types;
executing the first function to obtain a collection of data in the data structure;
extracting the collection of data in the data structure;
sending the extracted collection of data in the data structure to the output buffers; and
returning the data in the output buffers according to the query duration types.

At least the above-bolded portions of Claim 31 are not disclosed, taught, or suggested by *Tamboli* or *APA* in view of *Srinivasan*.

DIFFERENCES BETWEEN CLAIM 31 AND TAMBOLI

The Office Action alleged that *Tamboli* paragraphs [0075]-[0077] teach each of the limitations in Claim 31. However, Claim 31, as amended, recites limitations that were not disclosed within the cited paragraphs of *Tamboli*. Specifically, “*registering query duration*

*types based upon the list of data types; generating **output buffers** according to the query duration types; completing **query processing using the query duration types**; type-checking the first function using the query duration types ”* was not disclosed. *Tamboli* failed to disclose or teach an object analogous to query duration types, much less output buffers generated according to the query duration types. Furthermore, the query duration types are used in query processing which *Tamboli* also fails to disclose.

It is respectfully submitted that, for at least the above reasons, *Tamboli* does not disclose, teach, or suggest the above-bolded elements of Claim 31. As at least one element is not disclosed, taught, or suggested by *Tamboli*, Claim 31 is patentable over the cited art and is in condition for allowance.

DIFFERENCES BETWEEN CLAIM 31 AND APA IN VIEW OF SRINIVASAN

Claim 31 recites the use of query duration types and output buffers generated according to those query duration types. Claim 31 recites, “*registering **query duration types** based upon the list of data types; generating **output buffers** according to the query duration types; completing **query processing using the query duration types**; type-checking the first function using the query duration types ”* was not disclosed. Both *APA* and *Srinivasan*, alone or in combination, failed to disclose or teach an object analogous to query duration types, much less output buffers generated according to the query duration types. Furthermore, the query duration types are used in query processing which neither *APA* nor *Srinivasan* disclose.

It is respectfully submitted that, for at least the above reasons, *APA* in view of *Srinivasan* does not disclose, teach, or suggest the above-bolded elements of Claim 31. As at

least one element is not disclosed, taught, or suggested by *APA* in view of *Srinivasan*, Claim 31 is patentable over the cited art and is in condition for allowance.

CLAIMS 16, 22 and 33

Claim 16 contain limitations similar to Claim 1 except Claim 16 is recited in computer system format. Therefore, Claim 16 is patentable for at least the reasons given above with respect to Claim 1.

Claims 22 and 33 contain limitations similar to Claims 1 and 31 except Claims 22 and 33 are recited in computer-readable medium format. Therefore, Claims 22 and 32 also are patentable for at least the reasons given above with respect to Claims 1 and 31.

DEPENDENT CLAIMS

Claims 4, 5, 9, 25-28, and 30 directly depend upon independent Claims 1, 16, and 22. Therefore, these dependent claims also include the limitations of the independent claim upon which they depend. Thus, dependent Claims 4, 5, 9, 25-28 and 30 are patentable for at least those reasons given above with respect to Claims 1, 16, and 22. In addition, each of Claims 4, 5, 9, 25-28 and 30 introduce one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Please charge any shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,
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